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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
I0/584,986	06/30/2006	Sigemasa Takagi	TIP.046	2438
23408	7590	11/30/2009	EXAMINER	
GARY C. COHN, PLLC P. O. Box 313 Huntingdon Valley, PA 19006			KNABLE, GEOFFREY L	
			ART UNIT	PAPER NUMBER
			1791	
			NOTIFICATION DATE	DELIVERY MODE
			11/30/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

garycohn@seattlepatent.com

Office Action Summary	Application No. 10/584,986	Applicant(s) TAKAGI ET AL.	
	Examiner Geoffrey L. Knable	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-14,16,17 and 19-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-14,16,17 and 19-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/30/06; 1/14/08</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Applicant's election without traverse of the group II species in the reply filed on 9/1/2009 is acknowledged. All remaining claims read on the elected species.

2. Claims 1, 3, 4, 6-14, 16, 17 and 19-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 1, line 14, reference is made to the group of small rollers being "on a peripheral surface of that rotating body". It however is not seen where the original disclosure describes the location of the small rollers in this manner, this therefore being subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, i.e. it would appear to be new matter. There is no explicit literal support for the small rollers being on a peripheral surface and there does not appear to be sufficient description/depiction to conclude that such would have been implicit. This same lack of description rejection applies to the same language used in claims 6 and 14.

3. Claims 1, 3, 4, 6-14, 16, 17 and 19-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In addition to the lack of description issue above, the scope of what is meant by the rollers being "on a peripheral surface" of the rotating body (in claims 1, 6 and 14) is

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ambiguous. Thus the relationship between these rollers and this cylindrical body cannot be readily ascertained. It is also not clear exactly what constitutes the cylindrical rotating body and what constitutes the rollers on the rotating body, especially since the cord is described as wound on the rotating body (e.g. are the small rollers mounted to some form of solid cylinder, as would be implied from the reference to a peripheral surface, or is there some other relationship; or do only the rollers themselves form and define the cylindrical rotating body?) Clarification is required of the scope of the claims in this regard.

In the last line of claim 4, it is not clear which is the “former” cylindrical rotating body. This same ambiguity is present in the last line of claim 17.

Claims 8 and 9 are indefinite as they depend from cancelled claim 2.

In claim 12, line 3, the antecedent for the “groups” (i.e. plural) is not readily ascertainable.

In claim 14, line 10, no antecedent has been established for the “groups” (i.e. plural).

In claim 14, line 11, it is confusing to describe that the cord is contacted with “other rubber coated cord” as it would seem that it would in fact be the same rubber coated cord (albeit a different turn on the mandrel).

In claim 14, line 13, no literal antecedent has been established for “the cylinder”.

In claim 16, line 2, it seems that “to” (after comprising) should be deleted.

Each of claims 19-22 define a “method” in the preamble but have been amended to depend from claim 12, which is directed to an *apparatus*. The scope of claims 19-22

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is therefore entirely indefinite and confusing. These claims will be read for purposes of the prior art rejections as if depending from method claim 14 but clarification is required.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 3, 6, 8-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall et al. (US 2,759,521) taken in view of Steward (US 3,910,808).

Hall et al. discloses an apparatus for manufacturing a cylindrical wire reinforced structure including a pair of cylindrical rotating bodies, one formed by the group of small rollers "46" and the other formed by the cylinder "40", where the rollers "46" can be at an oblique angle to the roll "40" (e.g. as illustrated in fig. 3). Further, the reinforced tape is guided/supplied and spirally wrapped around "40" and rollers "46" and moved axially along the rolls. Although Hall et al. does not describe a rubber coated cord, this relates

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to the material worked on, the Hall et al. apparatus being capable of applying a rubber coated cord if desired. Hall et al. therefore is considered to suggest an apparatus consistent with claim 1 except that it does not describe that the axis of the small rollers are angled to one another.

Steward is also directed to forming a helically wound tube and expressly suggests it to be desirable to cant the rolls upon which the tube is wound a few degrees to help axially advance the tube being wound - e.g. col. 3, lines 1-16. To cant the small rolls "46" of Hall et al. a few degrees would therefore have been obvious with an expectation of helping to axially advance the tube being wound – only the expected and predictable results would have been achieved. An apparatus as required by claim 1 would therefore have been obvious.

As to claim 3, note col. 6, lines 15-19. As to claim 6, note adjustability provided by radial slots "160" (e.g. fig. 1). As to claim 8, given that this relates the roller size to the material worked on, it is satisfied if a material could be supplied such that the relationship were met. In any event, in view of fig. 3 of Hall et al. it is apparent that even the intended tape width relative to the roll length would be within the claimed range. As to claim 9, the rotating tube would be expected to drive the rolls "46" at the same velocity. As to claim 10, roll 32 acts as a presser. As to claim 11, providing a cutter to cut off the hose at the desired length would have been obvious, it being obvious to provide a simple fixed cutter which would necessarily have been capable of a spiral cut as the hose would be rotating and advancing relative thereto – the apparatus claims do not clearly distinguish this. As to claim 13, twisted wire being well known and obvious

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for reinforcement, it would have been obvious to include an inline twister if desired for only the expected results, including avoidance of the need for intermediate storage.

7. Claims 12, 14, 16, 19, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall et al. (US 2,759,521) taken in view of Steward (US 3,910,808) as applied above, and further in view of Mizutani et al. (US 3,919,026).

As to claim 12, Hall et al. does not provide specifics of the hose materials. It however is well known and conventional in this art to form reinforced helically wound hoses from various rubber and plastic materials and to extrusion coat the reinforcement to form the tapes to be wound – Mizutani et al. is exemplary. To extrusion coat to form the reinforced tape of Hall et al. would therefore have been obvious and lead to only the expected results.

As to claim 14, Hall et al. and Steward are applied for the same reasons as applied against claim 1, it being obvious to form the reinforced cylinder/hose using a reinforced rubber tape in view of Mizutani et al. as described above. As to claims 16 and 19, Hall et al. is applied as against claims 3 and 6. As to claim 21, the references are applied for substantially the same reasons as applied against claim 11, it being noted that claim 21 does not at present clearly and unambiguously define that the cutting forms a flat sheet from the cylinder material. As to claim 22, the references are applied for the same reasons as applied to claim 12.

8. Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall et al. (US 2,759,521) taken in view of Steward (US 3,910,808) (and for claim 17,

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further in view of Mizutani et al. (US 3,919,026)) as applied above, and further in view of at least one of [Ishikawa et al. (US 3,658,625) and Petzetakis (US 4,033,808)].

To include a push roller to push adjacent turns together would have been obvious in view of Ishikawa et al. (note stepped part “11”) and Petzetakis (note roller “7”) which evidence such to be conventional to help join/advance adjacent turns of a helically wound tube.

9. Claims 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall et al. (US 2,759,521) taken in view of Steward (US 3,910,808) (and for claim 20, further in view of Mizutani et al. (US 3,919,026)) as applied above, and further in view of Schlemmer (US 4,454,000).

As to claims 7 and 20, it is well known to use a splice roller pair to help adjoin adjacent edges to be spliced – Schlemmer is exemplary - it being obvious to use such to help joint adjacent turns of a helically wound tube as in Hall et al.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Geoffrey L. Knable/
Primary Examiner, Art Unit 1791

G. Knable
November 22, 2009